Contents

- Overview
 - 1. Objectives
 - 2. Prerequisites
 - 3. Demo Due Date
 - 4. Scoring
- o Function Assignment
- Appendix
 - 1. Human Resource Entity Relationship Diagram

Overview

Objectives

The objectives of this lab are:

- Use aggregate functions.
- Identify the available group functions.
- Use group functions.
- Describe the types of problems that subqueries can solve.
- Define subqueries.
- List the type of subqueries.
- Write single-row and multiple row subqueries.

Prerequisites

1.	Read Chapter 4 pages 90-109 and pages 117-127 on Aggregate/Group Functions.
2.	Read Chapter 6, pages 168-181 on Subqueries.
3.	Work your way through the examples on pages 117-127 and 161-181.

- For now just read about using the UPDATE and DELETE statements using subqueries. You will learn more about UPDATE and DELETE statements in a future lab.
- You do not have the Store schema tables installed in your schema. The Store schema tables are available in the STOREDB schema.

Winter 2021 Page 1

 To use the Store Schema tables in your textbook examples, you need to put STOREDB. (dot) in front of the table names. For example, to run the command in the middle of page 34 you would write:

SELECT price * 2 DOUBLE_PRICE FROM storedb.products;

Note the "storedb" can be either upper or lower case.

Demo Due Date:

For all sections, the lab demo is due in 1 week (Mar 01-05) by the end of your lab session.

Scoring:

Lab is worth 9 marks. Each query is worth 1 mark.

Functions

Demo

4.	As per Lab01, create a Lab05 folder.
5.	For the following, you will need to use the Human Resource tables you created in Lab01. These questions do not use the STOREDB tables used in the textbook examples, only the tables you installed from Lab01 (e.g. the Employees table). Don't forget to use the DESC statement to view the structure (the column names) of a table. For example, use DESC Employees to view the structure of the Employees table. The appendix contains an Entity Relationship diagram of the Human Resource tables.
6.	For the subquery part of this lab you are required to use subqueries in your query statements. No equijoins or other types of joins should be used. Use subqueries whenever possible. *** If your solution to the assignment question does not contain subqueries, you will get zero for that question. ***
4.	The file Lab05_Questions.sql has 9 questions in it. Download this to your lab05 folder. Each query is worth 1 mark. For this lab you will be required to answer some of the questions using the ANSI SQL/86 standards and the ANSI SQL/92 standards.

5. After you have created the SQL query for each question, add that SQL under the question in the file.

Note: Be sure to use proper formatting in your SQL statements. The SELECT should be on one line, the

FROM on another line and so on. Each clause should start a new line. You will lose marks if you do not

Winter 2021 Page 2

use proper formatting with your SQL statements!

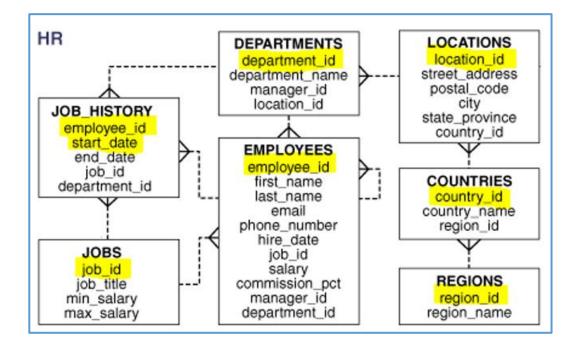
6. Demo to the instructor that your script executes successfully in SQL*Plus. (9 marks)

Appendix

Human Resource Entity Relationship Diagram

- Column names high-lighted in yellow are the Primary Key.
- Represents a 1 to many relationship. For example, the location_id in the LOCATIONS table could appear many time in the location_id of the DEPARTMENTS table. Try running the following query and you can see that the same location id appears multiple times.

SELECT location_id FROM departments ORDER BY location_id;



Winter 2021 Page 3